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Attorney Reference Number 6047-61247 Application Number 09/971,872

IN THE UNITEDISTATES PATENT AND TRADEMARK OFFICE

In re Application of: Prindiville et al.

Application No. 09/971,872

Filed: October 4, 2001

For: SEMICONDUCTOR PACKAGES AND

METHODS FOR MAKING THE SAME

Examiner: Ishwarbhai B. Patel

Date: November 12, 2002

BOX NON-FEE AMENDMENT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231 Art Unit: 2827

CERTIFICATE OF MAILING

I hereby certify that this paper and the documents referred to as being attached or enclosed herewith are being deposited with the United States Postal Service on November 12, 2002 as First Class Mail in an envelope addressed to: BOX NON-FEE AMENDMENT, COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231.

Wayne W. Rupert Attorney for Applicant

REPLY TO OFFICE ACTION

This is a reply to a non-final Office Action mailed August 14, 2002. A reply is due by November 14, 2002. Applicants notes that the Office Action does not include an examiner-initialed copy of the Form 1449 submitted by applicants with their Amendment mailed April 29, 2002. Applicants request that the examiner please include an initialed copy of the Form 1449 in the next action. A Letter to the Official Draftsperson submitting further corrected drawings of FIGS. 1A, 3A and 3B accompanies this reply.

Remarks

The Office Action mailed August 14, 2002, has been reviewed and the comments of the examiner carefully considered. Claims 10-12, 23, 37 and 38 have been rejected under 35 U.S.C. § 103 over Eng et al. combined with Vindasius et al., Sheppard et al., and Heo et al. Applicants acknowledge the indication that claims 13, 14 and 36 recite allowable subject matter. Please note that the Office Action Summary incorrectly states that claim 37, rather than claim 36, recites allowable subject matter.

As recognized by the examiner, Eng et al. does not teach a substrate that includes a cover member as recited in independent claims 10 and 23. However, the examiner takes the position "it would have been obvious to one having ordinary skill in the art to construe a defective pattern on the substrate covered with a cover member in the assembly of Eng, as there will be defective pattern as well as

defective die as disclosed by Heo, Vindasius and Sheppard." Heo et al. does disclose defective patterns on substrates and Vindasius and Sheppard do disclose defective die, but a critical suggestion is missing from the relied upon references. Namely, there is no teaching of specifically utilizing defective die as a cover member at defective substrate sites. Simply because the asserted prior art combination allegedly suggests that defective patterns and defective die may exist at random positions on a substrate does not give rise to a reasonable expectation that a defective die will be aligned with a defective pattern. Such an expectation especially would not have occurred in view of the silence in the prior art regarding the desirability of such an alignment.

With respect to the specific secondary references, Heo et al. is only concerned with marking defective patterns. There is no mention of any problems regarding wire bond slots associated with such defective patterns, much less any need to cover the wire bond slot. Vindasius et al. and Sheppard et al. only refer to a defective die, they do not even mention substrates having defective patterns or die attach sites. It follows that neither Vindasius et al. nor Sheppard et al. could possibly suggest attaching a cover member to a substrate that includes a defective site. In fact, Sheppard et al. teaches that a defective die should be detached from the substrate, which is opposite of intentionally utilizing a defective die as a cover member (column 4, lines 63-65). Vindasius et al. teaches that a defective die may be disconnected by destroying the electrical connections to the defective die by either laser vaporization, mechanical abrasion, or electrical defusion (column 6, lines 18-24). There is no suggestion that the defective die could be used as a cover member.

For the foregoing reasons, it is submitted that the pending 35 U.S.C. § 103 rejection should be reconsidered and withdrawn. Should there be any questions regarding this application, Examiner Patel is invited to contact the undersigned attorney at the telephone number shown below.

Respectfully submitted,

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